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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,600	09/10/2001	Ludo Adriaensen	016782-0230	6512

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EXAMINER

GRAY, JILL M

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/857,600	Applicant(s) ADRIAENSEN ET AL.	
	Examiner Jill M. Gray	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-24, 31-38 and 41-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-24, 31-38 and 41-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicants' remarks regarding the number of non-final Office Actions has been noted. The examiner apologizes for any inconveniences to applicants. The examiner also reminds applicants that an applicant for a patent, any of whose claims has been twice rejected, may appeal from the decision of the primary examiner to the Board of Patent Appeals and Interferences. MPEP 1204.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 20, 23-24, 32, 35-38, 41-42, and 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosemann et al, 4,944,813 (Hosemann) in view of Van Vlaenderen 3,829,545 and Takazawa et al, 4,774,105 (Takazawa), for reasons of record.

Hosemann teaches a method for manufacturing a coated steel wire having a bright looking surface, said method comprising the steps of providing a steel core, coating the steel core with an intermediate coating layer, drawing the coated steel core so that the intermediate coating obtains a bright looking surface, wherein the drawing step is a wet drawing step, per claims 20, 23, 32, and 35. See column 3, lines 33-35 and Examples. In addition, Hosemann teaches that the intermediate coating layer

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provides enhanced properties such as good protection from rust formation and electrical insulation. Hosemann does not teach the step of obtaining and further coating said steel core with a thermoplastic polyester.

Van Vlaenderen teaches a process of manufacturing polyethylene terephthalate coated wire comprising extruding polyethylene terephthalate onto a steel wire. See abstract. In addition, Van Vlaenderen teaches that his coated wire is resistant to weather and corrosion and that the polyethylene terephthalate can be amorphous. See column2, lines 45-48 and column 5, lines 7-10.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Hosemann by including the steps of obtaining a transparent thermoplastic polyester and further coating his steel core with said polyester, as taught by Van Vlaenderen in order to provide steel wires having increased resistance to corrosion and formation of rust. While Van Vlaenderen does not specifically state that the polyester is transparent it is the position of the examiner that this property is not a matter of invention because amorphous polyethylene terephthalate is known in the art to have a natural color that is clear and transparent. In addition, Takazawa et al, is cited to show the state of the art at the time the invention was made, in particular, that coating steel wires with an intermediate coating and further coating with polyester is a known process, and said coated wires are known. As to claims 37 and 38, this process limitation is not construed to be a matter of invention because processing of coated steel wires to result in a bright surface is known in the art.

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To determine the amount of brightness or degree of roughness is construed to be no more than an obvious design choice during routine experimentation.

2. Claims 20-21, 23, 31-33, 35, 37-38, and 41-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strohmeier 3,630,057 in view of Wiener 3,446,758 and Findlay et al, 5,892,176 (Findlay) cited to show the state of the art for reasons of record, further in view of Great Britain Publication 2,077,762 (Sou), cited to show the state of the art at the time the invention was made.

Strohmeier teaches a method of manufacturing a coated steel wire comprising providing a steel core, coating said core with an intermediate coating layer, and drawing said coated steel core, wherein the intermediate coating layer comprises a copper-sulfate coating. The intermediate coating layer is applied through a process commonly known in the art as a "hot dip" operation, per claims 21 and 33. See abstract and column 1, lines 17-19. In addition, the process of Strohmeier of immersion drawing plated steel wires using grease or lubricant is a known process that commonly results in a bright or shiny surface of the resultant wire. Note Sou, page 1, lines 46-47, cited to show the state of the art. Accordingly, the examiner has reason to believe that the copper-plated steel wire of Strohmeier has a bright looking surface in the absence of factual evidence to the contrary. Furthermore, this requirement is not construed to be a matter of invention, rather, that which is generally expected in this art. Strohmeier does not include the step of further coating with a thermoplastic polyester. Wiener teaches coating steel wires with polyester to produce wires having good electrical insulating properties. See Examples. In addition, Wiener teaches that his polyesters can be

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polyethylene terephthalate and can be coated on electrical conductors such as copper, steel or aluminum, per claim 31. Though Wiener does not specifically state that the polyester is transparent, it is the position of the examiner that this property is not a matter of invention because polyethylene terephthalate is known in the art to have a natural color that is clear and transparent. It would have been obvious to modify the process of Strohmeier by adding an additional step of further coating with a polyester in order to produce wires having good insulating properties, motivated by the teachings of Wiener. The fact that Strohmeier teaches a copper-plated steel wire is of no moment, in view of the teachings of Wiener that his coating can be applied to copper or steel with a reasonable expectation of success. Findlay is cited merely to show the state of the art and that electrical conductors comprising copper-plated steel wires are known in the art. As to claims 37 and 38, this process limitation is not construed to be a matter of invention because processing of coated steel wires to result in a bright surface is known in the art. To determine the amount of brightness or degree of roughness is construed to be no more than an obvious variant during routine experimentation commensurate with the desired end product.

Therefore, the combined teachings of Strohmeier, Wiener, Sou and Findlay would have rendered obvious the invention as claimed in present claims 20-21, 23, 31-33, 35, and 37-38.

3. Claims 22 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosemann et al, 4,944,813 (Hosemann) in view of Van Vlaenderen 3,829,545 and Takazawa et al, 4,774,105 (Takazawa), as applied above or alternatively, Strohmeier

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3,630,057 in view of Wiener 3,446,758 and Findlay et al, 5,892,176 (Findlay) and Great Britain Publication GB 2,077,762 (Sou) also as applied above, and each further in view of Kotera et al, 4,340,519 (Kotera).

Claims 22 and 34 require the step of adding a coloring agent to the polyester. Kotera teaches the formation of polyester coatings wherein a coloring agent is added to the polyester. It would have been an obvious variant at the time the invention was made to modify the teachings in the cited prior art by including a step of adding a coloring agent to the polyester, as taught by Kotera. Moreover, this requirement is drawn to the color of the polyester, wherein changes in color ordinarily are not a matter of invention. There is no evidence on the record of unexpected or superior properties of the resultant method or coated steel wire, said unexpected or superior properties being directly related to the addition of a coloring agent to the polyester.

Response to Arguments

4. Applicant's arguments filed August 4, 2006 have been fully considered but they are not persuasive.

Applicants argue that the entirety of Hosemann is directed towards (nonmetal) phosphate coatings and does not disclose, or even suggest an intermediate (metallic) coating as claimed.

The examiner disagrees. In particular, Hosemann teaches the formation of zinc calcium phosphate coatings. It is the position of the examiner that the language of "metallic coatings" and "a zinc alloy coating" embrace metal containing coatings such as those taught by Hosemann.

Applicants argue that the grounds for rejecting the claims in view of Strohmeier are insufficient to establish a *prima facie* case for obviousness due to applicants request that the PTO cite a reference and exactly identify where such a reference teaches the alleged bright surface from immersion drawing.

In this regard, it was the presumption of the examiner that applicants were familiar with the prior art that is of record in the present application, in particular that prior art that had been made of reference. Said prior art and teachings therein thereby being established as that which can be construed as the general level of knowledge and skill in the art at the time the invention was made. The examiner apologizes for any presumptions so made. That being said, applicants attention is directed to Great Britain Publication GB 2,077,762, page 1, lines 46-47, submitted by applicants on 9/10/01 as prior art.

Applicants argue that the examiner must provide rationale or evidence tending to show inherency and that in the present case, no such rationale or evidence has been provided in the Office Action.

In this regard, it has been established on this record that it is known in the art that wet drawing gives a bright finish to wire. Accordingly, the skilled artisan would reasonably presume that the wet drawing process of Strohmeier would result in a bright shiny finish as well. Applicants have provided no factual evidence to the contrary.

Applicants argue that there is no evidence in the references that one of ordinary skill in the art would have had a reasonable expectation of success in achieving applicants' invention by combining Hosemann with Van Vlaenderen.

In this regard, the skilled artisan would have been motivated to combine the teachings of Hosemann and Van Vlaenderen by the reasonable expectation of success in achieving a coated wire that is resistant to weather and corrosion. Said combination resulting in that which applicants' regard as their invention.

Applicants argue that Hosemann teaches away from the invention of the claims as amended because Hosemann teaches to use nonmetals as opposed to metals in his coatings, further arguing that the ordinary artisan would not have expected the polyethylene terephthalate of Van Vlaenderen to adhere to the phosphorus coating of Hosemann.

In this concern, as set forth previously, it is the position of the examiner that the language of "metallic coating" and "zinc alloy coating" embrace the metal containing coatings of Hosemann. As to the adherence of polyethylene terephthalate to the coating of Hosemann, there is no factual evidence on this record to substantiate this argument.

Applicants argue that with respect to claims 37 and 38 the wire of the present invention must maintain its bright surface after polyester is disposed upon the bright surface else the degree of brightness could not be obtained, further arguing that after polyethylene terephthalate deposition on the Hosemann wire, the phosphate coating may in fact absorb moisture and any bright surface that may be present with regard to the Hosemann wire may in fact no longer be present and therefore a *prima facie* case of obviousness has not been established.

In this concern, there is no factual evidence on this record to substantiate applicants' arguments.

No claims are allowed.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jill M. Gray
Primary Examiner
Art Unit 1774

jmg